



## Automated Cell Counter without Slides

# Why Do Scientists Choose Halo counter?

## Automated Cell Counting Without Slides

eliminate costs and plastic waste

## Easy Operation and Fast Running

automatic focus,scan,exposure and imaging

## Advanced Deep Learning Algorithms

more accurate cell division and viability result

## High Throughput Counting

count 4 or 8 sample simultaneously

## Wide Dynamic Range

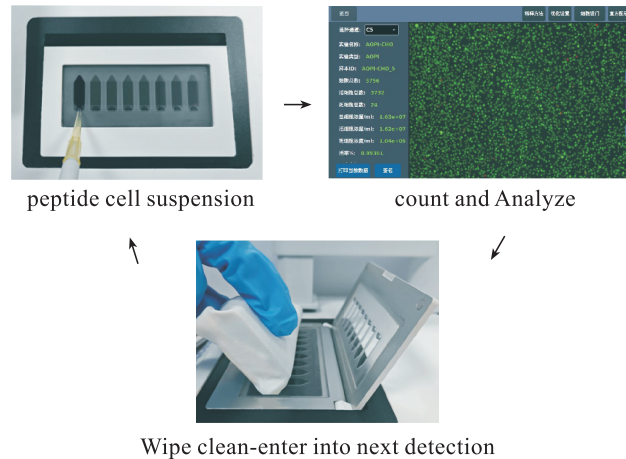
$1 \times 10^3 - 3 \times 10^7$  cells/mL

## Adherent cell analysis

compatible with well plate,petri dish and T25 flask

## High throughput and Without slides

Our patented technology abandons hemocytometer and plastic slides, which has been using in cell counting traditionally. The cutting-edge surface coated nanomaterial, ensure smooth injection and much easier to clean. Meanwhile, Halo counter could count four or eight cell samples. After wiping the sample surfaces with a dustless cloth, Halo counter is ready for the next count. The variable height chamber extends the accurate density range of samples.

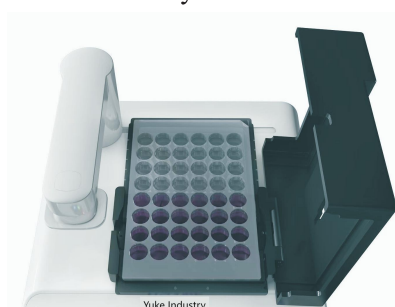


**Widest dynamic range:  $1 \times 10^3 \sim 3 \times 10^7$  cells/ml**

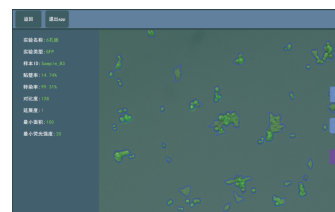
**Cell size range: 0.8 – 400  $\mu\text{m}$**

## Adherent cell analysis

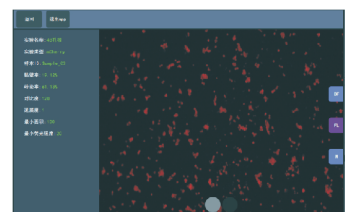
Halo box adapter can contain petri dish,6-96 well plate and T25 flask for adherent cell analysis, including cell growth,confluence,GFP and RFP transfection efficiency.



### Example:



6-well plate GFP transfection efficiency



48-well plate mCherry transfection efficiency



6-well plate bright-field



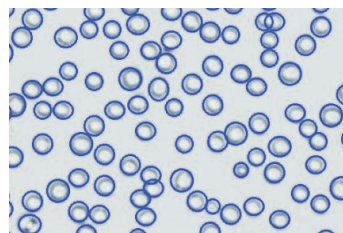
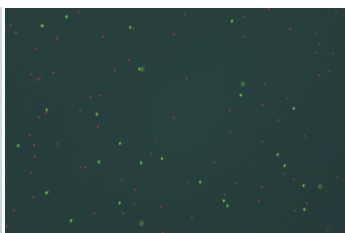
24-well plate bright-field

## Artificial Intelligence algorithms

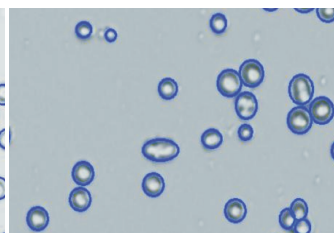
Based on neural networks algorithms, Halo counter can offer more accurate cell division and viability analysis.



Cell Viability of Primary Splenocytes



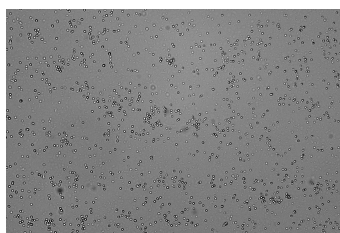
Cluster cell identify accurately



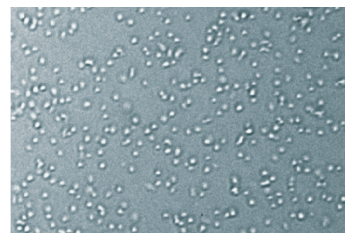
irregular cell identify

## Variable magnification for different Size cell

Halo counter offer 4x and 10x objective to measure cell size from 1 to 400µm. smaller cell can be detected, such as, Algae, *E.coli*.



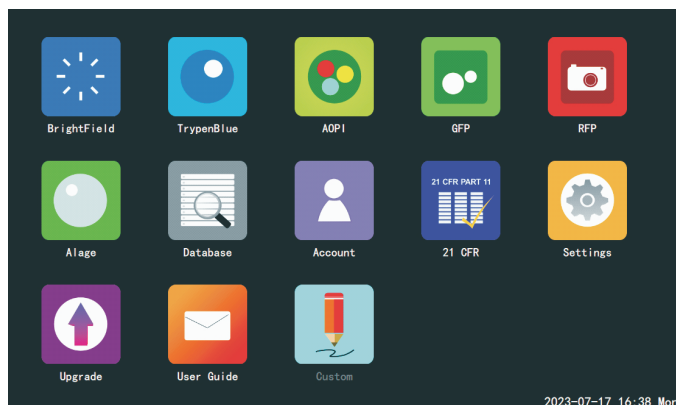
Algae under 10x objective



E.coli under 10x objective

## Intuitive user interface

Halo Counter instruments are stand-alone systems with intuitive user interface. It preinstalled with cell counting and viability apps for Bright field, Trypan blue, AO/PI, GFP, RFP, Alage, Yeast and *E.coli* Apps. They are easy to operate and run fast.



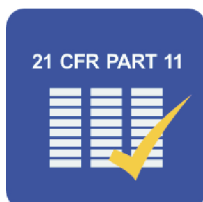
## Quick, Accurate and Reproducible Result

Auto-scan, auto-focus, auto-exposure, auto-imaging analysis with smart AI algorithm. Halo counter enables the most accurate counts with Brightfield around 3 seconds, AO/PI around 5 seconds.

## CFR21 Part11

Halo counter provides an optional suite of software controls for regulated GxP facilities. The software is fully integrated within the onboard operating system and includes a range of features essential to ensuring compliance, including:

- Password protected system access
- Integrated electronic signature controls
- Comprehensive user account management
- Secure audit trail recording
- Advanced data handling and export tools



## Specifications

	Bright Field Cell Counter	Fluorecence Cell Counter
Optics Channel	Bright Field, Trypen blue	Bright Field, Trypen blue, AO/PI, GFP, mCherry
Cell size range	$1 \times 10^3 - 3 \times 10^7$ cells/mL	
Concentration range	1-400 $\mu$ m	0.8~400 $\mu$ m
View of capture	1,3(normal)4,5	
Objective	4x or 4x&10x	
Sample volume	5 $\mu$ l(50 $\mu$ m height), 20 $\mu$ l (200 $\mu$ m height), 40 $\mu$ l (400 $\mu$ m height)	
Bright field	White LED	
Excitation light		488nm,587nm LED
Emission Filters		535nm and 600LP
Focus	Auto focus	
Camera	6.3MP CMOS	

## Order information

HD-4	Four Chambers Bright Field Cell Counter with 4X without slides
HD-8	Eight Chambers Bright Field Cell Counter with 4X without slides
HD-4FL	Four Chambers Fluorecence Cell Counter with 4X without slides
HD-8FL	Eight Chambers Fluorecence Cell Counter with 4X without slides
HD-4M	Four Chambers Bright Field Microbial Cell Counter with 10X without slides
HD-4MFL	Four Chambers Fluorecence Microbial Cell Counter with 10X without slides
HD-4+	Four Chambers Bright Field Cell Counter with 4X&10X without slides
HD-8+	Eight Chambers Bright Field Cell Counter with 4X&10X without slides
HD-4FL	Four Chambers Fluorecence Cell Counter with 4X&10X without slides
HD-8FL	Eight Chambers Fluorecence Cell Counter with 4X&10X without slides